

Statistical analysis of binary data

Advanced: professional techniques

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Pre-workshop assignment

Objective

To familiarise yourself with some of the concepts that will be discussed during the workshop.

Content

Reading articles on some of the concepts that will be discussed during the workshop.

Assessment criteria

None, but if you are completely new to analysis of binary data and you do not read the articles, you may struggle to keep up with the workshop.

Instructions

Read the articles below. If you understand them all, you will be well placed to benefit from the workshop. If you mostly understand them but find one or two things confusing, please make sure you identify your questions and come to the workshop ready to ask them at the appropriate point. If you find everything completely confusing, don't worry too much as all will be explained in the workshop, and your brain will be better prepared to take it in once you have read the articles, even if they didn't make much sense the first time round. Just make sure you have read them and understood as much as possible. Please don't worry at all if you don't follow all the mathematical details. The focus of the workshop is on concepts and understanding why tests are done and what they mean, not on scary formulas.

Resources and materials

<http://davidmlane.com/hyperstat/glossary.html>, then look at the following articles:

- Binomial distribution
- Contingency table
- Chi square independence test (make sure you click on "Click here for more information" to get all the details),

http://en.wikipedia.org/wiki/Fisher%27s_exact_test

<http://www.bandolier.org.uk/band25/b25-6.html>

<http://www.appstate.edu/~whiteheadjc/service/logit/> (sections 1 and 3 only)

Time required

1–2 hours